

CLAIMS

1. An ink container connectable and disconnectable to and from an ink supply path, comprising:

5 a plurality of ink containing parts for containing three or more different inks; and

10 a plurality of supplying parts which can be connected and disconnected to and from the ink supply path and which can supply plural types of ink contained in the plurality of ink containing parts, wherein

the plurality of supplying parts include a specific supplying part for supplying the ink which undergoes the most significant color change attributable to color mixing of the inks;

15 the plurality of supplying parts are disposed at respective intervals; and

20 the interval between the specific supplying part and another of the supplying parts adjacent thereto is greater than the intervals between other supplying parts excluding the specific supplying part.

25 2. An ink container according to claim 1, wherein the plurality of supplying parts can be connected and disconnected to and from a plurality of receiving parts in the ink supply path.

3. An ink container according to claim 1; wherein the inks contained in the plurality of ink containing parts include a yellow ink, a cyan ink, and a magenta ink; and

5 the ink which undergoes the most significant color change attributable to color mixing of the inks is the yellow ink.

10 4. An ink container according to claim 1, wherein the plurality of supplying parts are disposed on the same plane.

15 5. An ink container according to claim 1, further comprising a connecting section connectable and disconnectable to and from an ink supply path forming member in which the ink supply path is formed,

wherein the plurality of supplying parts are disposed at the connecting section.

20 6. An ink container according to claim 5; wherein the connecting section includes a tubular connecting member in communication with the ink containing part, a seal member for sealing an end of the connecting member, and a keep plate for securing the seal member at the end of the connecting member; and

25 the supplying part is located in an opening formed in the keep plate.

7. An ink container according to claim 5, wherein the ink supply path forming member is a constituent member of an inkjet printing head.

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8. An ink container according to claim 1, further comprising positioning means which positions the ink container relative to the ink supply path forming member in which the ink supply path is formed.

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9. An ink container according to claim 8, wherein the positioning means is located between the specific supplying part and another of the supplying parts adjacent thereto.

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10. An ink container according to claim 8, wherein the positioning means includes a hole which can be engaged with a protrusion provided on the ink supply path forming member.

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11. An inkjet printing head connectable and disconnectable to and from an ink container, comprising:
a plurality of ink ejecting parts capable of ejecting three or more different inks; and
a plurality of receiving parts which can be connected and disconnected to and from the ink container and which can receive the plural types of ink ejected by the plurality of ink ejecting parts from the ink container, wherein

the plurality of receiving parts include a specific receiving part for receiving the ink which undergoes the most significant color change attributable to color mixing of the inks;

5 the plurality of receiving parts are disposed at respective intervals; and

the interval between the specific receiving part and another of the receiving parts adjacent thereto is greater than the intervals between other receiving parts excluding
10 the specific receiving part of interest.

12. An inkjet printing head according to claim 11, wherein the plurality of receiving parts can be connected and disconnected to and from a plurality of ink supplying
15 parts of the ink container.

13. An inkjet printing head according to claim 11; wherein

the inks received by the plurality of receiving parts
20 include a yellow ink, a cyan ink, and a magenta ink; and
the ink which undergoes the most significant color change attributable to color mixing of the inks is the yellow ink.

25 14. An inkjet printing head according to claim 11, further comprising positioning means which positions the

inkjet printing head relative to the ink container.

15. An inkjet printing head according to claim 14,
wherein the positioning means is located between the specific
5 receiving part and another of the receiving parts adjacent
thereto.

16. An inkjet printing head according to claim 11,
further comprising a sub-tank in an ink supply path between
10 the receiving parts and the ink ejecting parts.

17. An inkjet printing apparatus for performing printing
on a printing medium using an inkjet printing head capable
of ejecting an ink supplied from an ink container, comprising
15 a mounting section for mounting an ink container according
to any of claims 1 to 10 and an inkjet printing head according
to any of claims 11 to 16 such that they can be connected
and disconnected to and from each other.

20 18. An inkjet printing apparatus according to claim
17, wherein the mounting section allows the ink container
to be removably mounted.

25 19. An inkjet printing apparatus according to claim
17, further comprising:
means for relatively moving the inkjet printing head

and the printing medium; and

means for relatively moving inkjet printing head and
the ink container close to and apart from each other.

5 20. An inkjet printing apparatus according to claim
17; wherein

the inkjet printing head includes a sub-tank located
in an ink supply path between the receiving part and the ink
ejecting part; and

10 the inkjet printing head and the ink container are
connected when the amount of ink remaining in the sub-tank
is equal to or smaller than a predetermined amount.

21. An inkjet printing apparatus according to claim
15 17, wherein a flow of ink from the ink container to the inkjet
printing head is generated when the ink container and the
inkjet printing head are connected.